

AF
JW



PTO/SB/21 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| | | | |
|---|----------------------|------------------------|---------|
| TRANSMITTAL FORM (to be used for all correspondence after initial filing) | Application Number | 09/841,402 | |
| | Filing Date | April 23, 3001 | |
| | First Named Inventor | ROBERT D. KLUSER | |
| | Art Unit | 3637 | |
| | Examiner Name | Janel Marie Wilkens | |
| Total Number of Pages in This Submission | 14 | Attorney Docket Number | 7201 US |

| ENCLOSURES (Check all that apply) | | |
|---|--|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Post Card |
| <div>Remarks</div> | | |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | | | |
|--|------------------|----------|--------|
| Firm Name | TEKTRONIX, INC. | | |
| Signature | | | |
| Printed name | Francis I. Gray | | |
| Date | October 28, 2004 | Reg. No. | 27,788 |

| CERTIFICATE OF TRANSMISSION/MAILING | | | |
|---|--------------------|------|------------------|
| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below: | | | |
| Signature | | | |
| Typed or printed name | Pauline L. Bradley | Date | October 28, 2004 |

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PTO/SB/17 (10-04v2)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL for FY 2005

Effective 10/01/2004. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 340.00

Complete if Known

| | |
|----------------------|---------------------|
| Application Number | 09/841,402 |
| Filing Date | April 23, 2001 |
| First Named Inventor | ROBERT D. KLUSER |
| Examiner Name | Janel Marie Wilkens |
| Art Unit | 3637 |
| Attorney Docket No. | 7201 US |

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit
Account
Number
Deposit
Account
Name

20-0352

TEKTRONIX, INC.

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description | Fee Paid |
|-------------------------------|-------------------------------|------------------------|----------|
| 1001 790 | 2001 395 | Utility filing fee | |
| 1002 350 | 2002 175 | Design filing fee | |
| 1003 550 | 2003 275 | Plant filing fee | |
| 1004 790 | 2004 395 | Reissue filing fee | |
| 1005 160 | 2005 80 | Provisional filing fee | |

SUBTOTAL (1) (\$)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

| | Extra Claims | Fee from below | Fee Paid |
|--------------------|--------------|----------------|----------|
| Total Claims | -20** = | X | |
| Independent Claims | - 3** = | X | |
| Multiple Dependent | | | |

| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description |
|-------------------------------|-------------------------------|--|
| 1202 18 | 2202 9 | Claims in excess of 20 |
| 1201 88 | 2201 44 | Independent claims in excess of 3 |
| 1203 300 | 2203 150 | Multiple dependent claim, if not paid |
| 1204 88 | 2204 44 | ** Reissue independent claims over original patent |
| 1205 18 | 2205 9 | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Small Entity

| Fee Code (\$) | Fee Code (\$) | Fee Description | Fee Paid |
|---------------|---------------|--|----------|
| 1051 130 | 2051 65 | Surcharge - late filing fee or oath | |
| 1052 50 | 2052 25 | Surcharge - late provisional filing fee or cover sheet | |
| 1053 130 | 1053 130 | Non-English specification | |
| 1812 2,520 | 1812 2,520 | For filing a request for ex parte reexamination | |
| 1804 920* | 1804 920* | Requesting publication of SIR prior to Examiner action | |
| 1805 1,840* | 1805 1,840* | Requesting publication of SIR after Examiner action | |
| 1251 110 | 2251 55 | Extension for reply within first month | |
| 1252 430 | 2252 215 | Extension for reply within second month | |
| 1253 980 | 2253 490 | Extension for reply within third month | |
| 1254 1,530 | 2254 765 | Extension for reply within fourth month | |
| 1255 2,080 | 2255 1,040 | Extension for reply within fifth month | |
| 1401 340 | 2401 170 | Notice of Appeal | |
| 1402 340 | 2402 170 | Filing a brief in support of an appeal | 340.00 |
| 1403 300 | 2403 150 | Request for oral hearing | |
| 1451 1,510 | 1451 1,510 | Petition to institute a public use proceeding | |
| 1452 110 | 2452 55 | Petition to revive - unavoidable | |
| 1453 1,370 | 2453 685 | Petition to revive - unintentional | |
| 1501 1,370 | 2501 685 | Utility issue fee (or reissue) | |
| 1502 490 | 2502 245 | Design issue fee | |
| 1503 660 | 2503 330 | Plant issue fee | |
| 1460 130 | 1460 130 | Petitions to the Commissioner | |
| 1807 50 | 1807 50 | Processing fee under 37 CFR 1.17(q) | |
| 1806 180 | 1806 180 | Submission of Information Disclosure Stmt | |
| 8021 40 | 8021 40 | Recording each patent assignment per property (times number of properties) | |
| 1809 790 | 2809 395 | Filing a submission after final rejection (37 CFR 1.129(a)) | |
| 1810 790 | 2810 395 | For each additional invention to be examined (37 CFR 1.129(b)) | |
| 1801 790 | 2801 395 | Request for Continued Examination (RCE) | |
| 1802 900 | 1802 900 | Request for expedited examination of a design application | |

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 340.00

SUBMITTED BY

Name (Print/Type) FRANCIS I. GRAY

Registration No. 27,788
(Attorney/Agent)

(Complete if applicable)

Telephone 503 627-7261

Signature

Date October 28, 2004

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: **ROBERT D. KLUSER and WARREN L. POWERS**

Filed: **April 23, 2001**

Examiner: **Janet Marie Wilkens**

Serial No.: **09/841,402**

Art Unit: **3637**

For: **MODULAR RACK MOUNTING SYSTEM**

October 28, 2004

Mail Stop Appeal Brief - Patents
COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Dear Sir:

This is an appeal from the rejection of the Examiner dated July 12, 2004 finally rejecting claims 1-5 and 4/8.

Real Party in Interest

Appellants' assignee, Tektronix, Inc., an Oregon corporation, is the real party in interest for this case.

Related Appeals and Interferences

There are no other appeals or interferences known to Appellants, Appellants' legal representatives or Appellants' assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

11/02/2004 CNGUYEN 00000007 200352 09841402

01 FC:1402 340.00 DA

Status of Claims

Claims 1-5, 7 and 8 are pending in the present appeal, with claim 6 having been canceled and replaced by claim 8. Claims 7, 5/8 and 7/8 are objected to as depending from a rejected base claim. The appealed claims are claims 1-5 and 4/8.

Status of Amendments

The amendment of August 23, 2004, filed by Appellants subsequent to the final rejection by the Examiner, has been entered by the Examiner.

Summary of the Invention

The present invention relates to a modular rack mounting system that is flexible for mounting instruments having different environmental requirements in an instrument rack. Prior rack mounting systems have had a "one size fits all" characteristic that are sized to fit either into a full rack or into a half rack by providing sleeves for the full rack that are half-rack size and are welded together. The sleeves are all standard and have ventilation holes that do not necessarily conform to all instrument environmental requirements. (Fig. 1; page 1, lines 5-23) This results in the requirement of an innumerable number of rack mounting systems to accommodate all environmental requirements. (Page 1, line 24 - page 2, line 1)

As shown in Fig. 2 the present invention has a central frame 12 suitable for mounting on an instrument rack that is formed from two portions 18, 20 that are

welded together to form a central compartment. A central rib 22 may be used to divide the central compartment into two compartments. One or more detachable sleeves 14, 16 within which an instrument may be mounted are configured to fit within the central compartment or into either of the two compartments defined by the rib. The sleeves are detachably secured to the frame, such as by holes 26 in the sleeves that engage snap and latch systems 28 mounted on the inside of the frame and/or the central rib. The sleeves slide into the respective compartments and the snap and latch systems include a button 30 that engages the hole in the sleeve to secure the sleeve in the frame. The button may be depressed from the interior of the sleeve to detach the sleeve from the frame. (Page 3, line 15 - page 4, line 10) The button may be mounted on a spring 48 to allow for such detachable snap and latch action. (Page 4, lines 18-22) The open nature of the frame together with the sleeves being adapted to conform to the particular environmental requirements of the instruments to be placed within them results in the desired flexible modular rack-mounting system.

Issues

(1) 35 U.S.C. 102(b):

Whether claim 1 is anticipated by Rodriguez (U.S. Patent No. 5,138,525)?

(2) 35 U.S.C. 103(a):

(i) Whether claim 4 is unpatentable over Rodriguez.

(ii) Whether claims 2, 5 and 4/8 are unpatentable over Rodriguez in view of Noda et al ("Noda" U.S. Patent No. 4,688,131) and Ryan et al ("Ryan" U.S. Patent No. 5,587,877)?

Grouping of Claims

Claims 1, 2, 4, 5 and 4/8 are deemed to be separately patentable, and claim 3 is deemed to stand or fall together with claim 1.

Argument

1. 35 U.S.C. 102(b)

35 U.S.C. 102(b) in pertinent part provides that “[A] person shall be entitled to a patent unless . . . the invention was patented . . . in this or a foreign country . . . more than one year prior to the date of the application for patent in the United States.” This has been interpreted to mean that all the elements of a claim, in order to be anticipated under this Section, must be contained within the four corners of a single prior art patent. (*Walker v. General Motors Corporation*, 362 R.2d 56, 58, 149 USPQ 472, 473-474 (9th Cir. 1966))

Rodriguez discloses a digital computer chassis or computer unit **20**, rather than a modular rack-mounting system as recited by Appellants, which uses a strut **15** (not a rib) between front and rear walls **17, 18** to provide structural rigidity and a conductor conduit **16**. The strut also provides a point of attachment and support for a power supply **22** and a hard disk drive **21**. (Column 2, lines 8-11) The computer chassis is not designed for mounting on an instrument rack, but rather is designed to be a self-contained unit. Also the structure of front and rear walls on a chassis (bottom) with a strut between them do not form a compartment – one of the parts into which an enclosed space is divided -- without also including a cover **26** to provide a top and side walls. Note that with the cover a sleeve **a** has no control over

the environmental requirements of anything (disk drives **25**) inserted therein, i.e., there is no environmental flexibility. The sleeve shown may be secured to the bottom of the chassis by what appears to be a tongue **c** in the bottom of the chassis that interacts with a hole **b** in the sleeve prior to putting the cover on. Such an arrangement does not appear to be readily detachable, but rather appears to be permanent.

Claim 1 recites a frame suitable for mounting on an instrument rack, which frame has a central compartment with a top, bottom and two sides. The Examiner equates this configuration to the entire inside of the computer unit. The computer unit has not only top, bottom and two sides, but also front and rear ends. Appellants submit that Rodriguez at best provides a structure having the front wall, rear wall and bottom with the strut, that incidentally divides the structure into two open regions, for rigidity. No compartment, i.e., enclosed space, is formed until the cover is put in place to complete the computer unit, at which time it is not possible to insert the sleeve into the "compartment." In Rodriguez the sleeve has to be mounted to the bottom of the chassis prior to the cover being put on, i.e., before any "compartment" exists. Therefore Rodriguez does not teach or suggest the "frame" as recited by Appellants.

Claim 1 further recites a sleeve within which an instrument may be mounted, which sleeve is configured to be inserted and fit within the central compartment. The sleeve of Rodriguez does reside within the "compartment" formed by the cover between the front wall and the power supply, but it is not insertable into the compartment as described above because it cannot be mounted once the cover is on to form the compartment.

Finally claim 1 recites means for detachably securing the sleeve within the compartment. Appellants submit, as discussed above, that the sleeve is not

“detachably” secured, rather than the sleeve is permanently secured. Therefore claim 1 is deemed not to be anticipated by Rodriguez because Rodriguez does not disclose all the elements together in the same way to perform the identical function as recited in claim 1.

2. 35 U.S.C. 103(a)

35 U.S.C. 103(a) recites in pertinent part that “[A] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which such subject matter pertains.” Under this Section “the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved.” (*Graham v. John Deere Co. of Kansas City*, 383 US 1, 148 USPQ 459, 467 (1966)) In order for it to be obvious to combine references to produce the claimed invention, there must be some teaching or suggestion in the references that would lead one of ordinary skill in the art to make such a combination. (*Ex parte Shepard et al*, 188 USPQ 536 (1974))

(i) With respect to claim 4 a rib is recited, not a strut as in Rodriguez. The recited rib, as shown in Fig. 2, is comparable to a rib defined as “a light fore-and-aft member in an airplane wing.” The purpose of the rib in Appellants’ claim is to separate a single compartment “into two equal compartments.” The purpose of the

strut of Rodriguez is merely to provide structural rigidity. Therefore, since the strut of Rodriguez serves a different function and is not in fact a rib, it is not equivalent to the rib recited by Appellants. Thus claim 4 is deemed to be patentable as being nonobvious over Rodriguez.

(ii) With respect to claims 2, 5 and 4/8 the Examiner states that Rodriguez fails to teach that the securing means is specifically a spring and button member, but that Noda teaches a securing means having a spring **88** mounted on a frame **24** and a button **94** mounted on the spring and extending through holes in the frame and sleeve **22**. Further the Examiner states that, assuming that the base of the frame in Rodriguez is flush with a support surface, a "fake bottom" **16** as taught by Ryan could be employed to allow the spring to flex; and when the components are removed from the sleeve, the buttons may be depressed from within the sleeve.

The first question to be answered is whether the teachings of Noda suggest to one of ordinary skill in the art the replacement of the tongue and hole securement means of Rodriguez with the spring and pawl mechanism of Noda. Is such a combination reasonably possible, and would it produce Appellants' claimed invention? Noda discloses a locking means that permits ready detachment of a magnetic disk assembly **22** from a disk drive compartment **32** within a housing **24**. The disk drive assembly has its own enclosure **34** with an entrance slot **40** for insertion of a disk cartridge **42**. The locking mechanism includes a cantilever spring **88** having a locking lever **86** at the free end with a pawl **94** that extends through first holes **96** in the compartment wall to engage corresponding holes **46** in the disk assembly. To detach the disk assembly a separate retraction mechanism **106** is

inserted into the entrance slot. The retraction mechanism has tripping levers 114 with tips 104 that may be extended through second holes 98 in the compartment wall to push the lock lever to lift the pawls out of the first holes so the disk assembly may be withdrawn. The pawl is not what is depressed, but rather the locking lever.

To combine Noda with Rodriguez would be to replace the tongue and hole arrangement of Rodriguez with the locking means of Noda, i.e., the locking means of Noda would be incorporated into the bottom of Rodriguez in lieu of the tongue and hole arrangement. Noda teaches the locking mechanism as being in the opposing side walls of the compartment (which do not exist in Rodriguez even with the cover on, as the “side” away from the cover is open), and not in the bottom or only one wall.

Claims 2 and 4/8 recite a spring mounted on a frame with a button that extends through a hole in the frame to engage a corresponding hole in the sleeve. These claims further recite that the button is accessible so that the button – not the lever arm upon which the button is mounted as in Noda – may be depressed from the interior of the sleeve to readily remove it from the frame. Therefore Noda does not teach or suggest that the pawl is depressed to remove the sleeve, but rather the intermediary element between the spring and the pawl is depressed via a secondary hole in the frame. Thus claims 2 and 4/8 are deemed to be allowable as reciting a configuration that is not taught or suggested by Noda.

Claim 5 recites that an inner spring is mounted on the central rib. The strut of Rodriguez is not a “rib” that divides a compartment into two compartments as its purpose is for structural rigidity, not compartment division, as discussed above. Further there is no way that a securing mechanism could be mounted on such strut

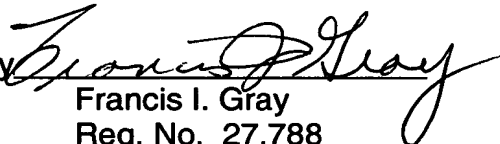
– certainly not the locking mechanism of Noda. Therefore the combination of Noda with Rodriguez does not produce the invention as recited in claim 5, and Appellants submit that claim 5 is patentable over Rodriguez in view of Noda and Ryan.

Conclusion

In view of the foregoing arguments Appellants submit that claims 1-5 and 4/8 are neither anticipated nor rendered obvious by Rodriguez, either alone or in combination with Noda, Ryan and/or Russo. Therefore Appellants request that the Examiner's rejection be reversed, and that this case be passed to issue.

Respectfully submitted,

ROBERT D. KLUSER et al

By 
Francis I. Gray
Reg. No. 27,788
Attorney for Applicant

TEKTRONIX, INC.
P.O. Box 500 (50-LAW)
Beaverton, OR 97077
(503) 627-7261

7201 US

Appealed Claims

1. A modular rack-mounting system comprising:

a frame suitable for mounting on an instrument rack, the frame forming
5 a central compartment having a top, a bottom and two sides;

a sleeve within which an instrument may be mounted, the sleeve being
configured to be inserted and fit within the central compartment; and

means for detachably securing the sleeve within the central
compartment.

10

2. The modular rack-mounting system as recited in claim 1 wherein the
securing means comprises:

a spring mounted on the frame;

a button mounted on the spring and extending through a hole in the
15 frame into the central compartment to engage a corresponding hole in the
sleeve when the sleeve is inserted within the central compartment, the button
being accessible from the interior of the sleeve so that, when the button is
depressed from the interior of the sleeve, the sleeve may be readily removed
from the central compartment.

20

3. The modular rack-mounting system as recited in claim 1 wherein the frame
comprises:

a left portion having fingers; and

a right portion having fingers, the fingers of the left and right portions
25 interlocking with each other to assure rigidity of the frame.

4. The modular rack-mounting system as recited in claim 1 further comprising a central rib mounted within the frame to form a central wall that divides the central compartment into two equal compartments, the sleeve being configured to fit within either compartment.

5

5. The modular rack-mounting system as recited in claim 4 wherein the securing means comprises:

an inner spring mounted on the central rib;

a button mounted on the inner spring to engage a hole in the sleeve

10

when the sleeve is inserted into one of the two compartments, the button being accessible from the interior of the sleeve so that, when the button is depressed from the interior of the sleeve, the sleeve may be readily removed from the one compartment.

15

7. The modular rack-mounting system as recited in claim 4 wherein the securing means comprises:

a first inner spring mounted on a first side of the central rib having a first button mounted on one end; and

20

a second inner spring mounted on a second side of the central rib in an opposing manner to the first inner spring and having a second button mounted on one end, the first and second buttons being mounted to engage corresponding holes in respective sleeves when the respective sleeves are inserted into the two compartments, the central rib having a rib hole between the button ends of the first and second inner springs to allow the button ends to deform into the rib hole when the buttons are depressed for removing the sleeves from the compartments.

25

8. The modular rack-mounting system as recited in claims 4, 5 or 7 wherein the securing means comprises:

an outer spring mounted on the frame;

5 a button mounted on the outer spring and extending through a hole in the frame into one of the two compartments to engage a corresponding hole in the sleeve when the sleeve is inserted within the one compartment.